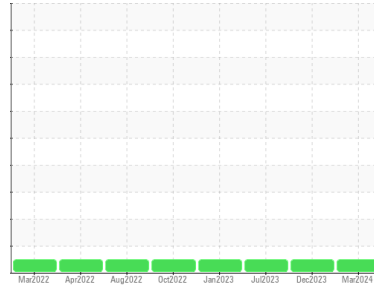




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area  
**[1236977]**

Machine Id  
**810049**

Component  
**Diesel Engine**

Fluid  
**DIESEL ENGINE OIL SAE 40 (--- GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

### Wear

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the oil.

### Fluid Condition

The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>GFL0093968</b>	GFL0093936	GFL0062928
Sample Date	Client Info			<b>13 Mar 2024</b>	19 Dec 2023	06 Jul 2023
Machine Age	hrs	Client Info		<b>5350</b>	4884	3776
Oil Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed	Client Info			<b>N/A</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>5		<b>&lt;1.0</b>	<1.0	<1.0
Water	WC Method	>0.2		<b>NEG</b>	NEG	NEG
Glycol	WC Method			<b>NEG</b>	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>100	<b>17</b>	43	39
Chromium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	2	2
Nickel	ppm	ASTM D5185(m)	>4	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	<1
Silver	ppm	ASTM D5185(m)	>3	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185(m)	>20	<b>2</b>	6	9
Lead	ppm	ASTM D5185(m)	>40	<b>0</b>	<1	<1
Copper	ppm	ASTM D5185(m)	>330	<b>2</b>	2	2
Tin	ppm	ASTM D5185(m)	>15	<b>0</b>	<1	<1
Antimony	ppm	ASTM D5185(m)		<b>0</b>	0	0
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Beryllium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185(m)		<b>0</b>	0	0

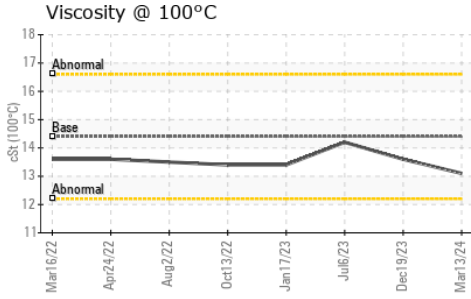
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	250	<b>6</b>	5	44
Barium	ppm	ASTM D5185(m)	10	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	100	<b>59</b>	61	14
Manganese	ppm	ASTM D5185(m)		<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185(m)	450	<b>911</b>	948	147
Calcium	ppm	ASTM D5185(m)	3000	<b>1095</b>	1212	2158
Phosphorus	ppm	ASTM D5185(m)	1150	<b>934</b>	1037	1031
Zinc	ppm	ASTM D5185(m)	1350	<b>1138</b>	1210	1198
Sulfur	ppm	ASTM D5185(m)	4250	<b>2320</b>	2597	2793
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	<b>2</b>	5	17
Sodium	ppm	ASTM D5185(m)	>216	<b>7</b>	8	4
Potassium	ppm	ASTM D5185(m)	>20	<b>1</b>	10	22

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>3	<b>0.3</b>	0.5	0.5
Nitration	Abs/cm	ASTM D7624*	>20	<b>10.2</b>	9.9	10.4
Sulfation	Abs./1mm	ASTM D7415*	>30	<b>20.8</b>	21.7	26.0



# OIL ANALYSIS REPORT



## FLUID DEGRADATION

method	limit/base	current	history1	history2	
Oxidation	Abs./1mm ASTM D7414*	>25	17.8	17.9	21.8

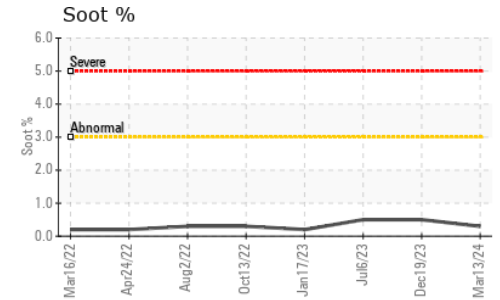
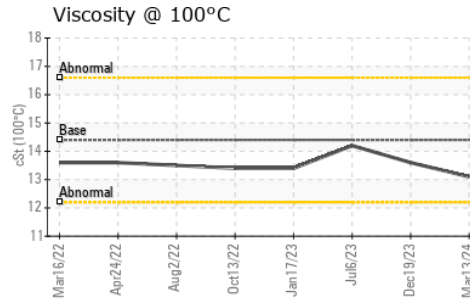
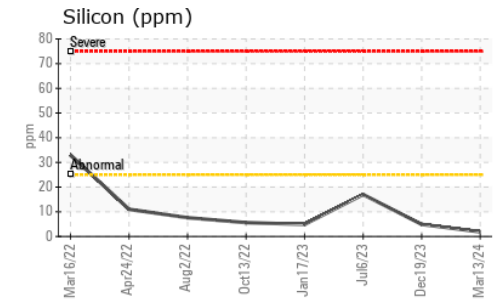
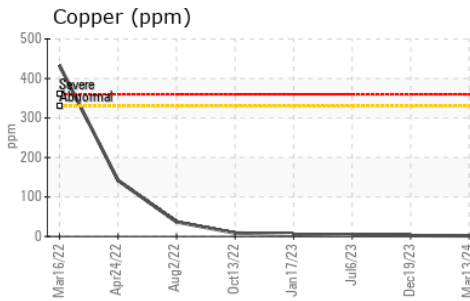
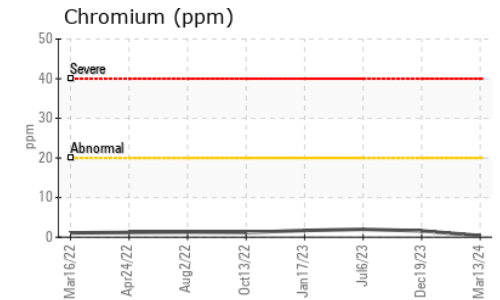
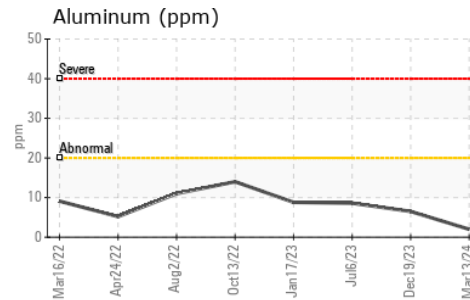
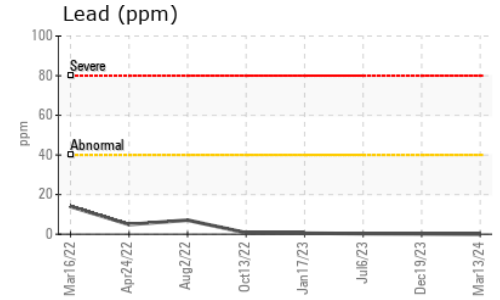
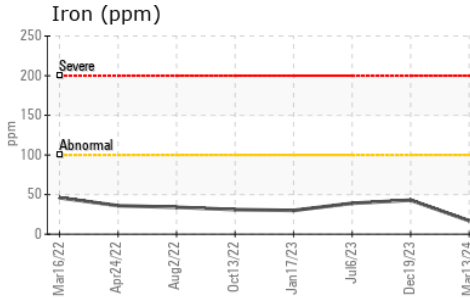
## VISUAL

method	limit/base	current	history1	history2	
Emulsified Water	scalar Visual*	>0.2	NEG	NEG	NEG
Free Water	scalar Visual*		NEG	NEG	NEG

## FLUID PROPERTIES

method	limit/base	current	history1	history2	
Visc @ 100°C	cSt ASTM D7279(m)	14.4	13.1	13.6	14.2

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0093968  
**Lab Number** : 02624129  
**Unique Number** : 5749248  
**Test Package** : MOB 1

**Received** : 25 Mar 2024  
**Tested** : 25 Mar 2024  
**Diagnosed** : 25 Mar 2024 - Wes Davis

**GFL Environmental - 777 - Belleville-Municipal waste**  
 197 Putman Industrial Road  
 Belleville, ON  
 CA K8N 4Z6  
 Contact: Andrea Michael  
 amichael@gflenv.com  
 T: (613)962-7144  
 F: (613)962-1994

To discuss this sample report, contact Customer Service at 1-800-268-2131.  
 Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab.  
 Validity of results and interpretation are based on the sample and information as supplied.